

Applicant: **Mark A. Ealey**
For: **TRANSVERSE ELECTRODISPLACIVE ACTUATOR ARRAY**

ABSTRACT OF DISCLOSURE

A transverse electrodisplacive actuator array for controlling the optical phasing of
a reflective surface includes a support structure; a plurality of electrodisplacive actuator
elements extending from a proximate end at the support structure to a distal end; each
5 actuator element including at least one addressable electrode and one common electrode
spaced from the addressable electrode and extending along the direction of said
proximate and distal ends along the transverse d_{31} strain axis; a reflective member having
a reflective surface and a mounting surface mounted on the actuator elements; and a
plurality of addressable contacts and at least one common contact for applying voltage to
10 the addressable and common electrodes to induce a transverse strain in addressed actuator
elements to effect an optical phase change in the reflective surface at the addressed
actuator elements.